The Visitors Sportfishing Survey – 1983/84

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THE VISITORS SPORTFISHING SURVEY

1983/84

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ABSTRACT

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The 1983 Visitors Sportfishing Survey obtained information about the sportfishing activities of visitors to B.C. There were 75,530 licenced visiting anglers in 1983. The majority of visiting anglers come from Alberta and Washington State.

Visiting anglers fished an estimated total of 497,165 angler days and caught 224,000 salmon. At the same time, they made expenditures which had a considerable impact on the Canadian economy. Non-resident total sportfishing expenditures totalled $58 million in 1983, and generated 1,857 direct and indirect person years of employment and $56 million worth of direct and indirect income impacts in British Columbia.

Visitor sportfishing has direct and indirect benefits for Canadians. The direct benefits consist of the fun and excitement that visiting Canadians receive from sportfishing, valued at 7.55 million dollars, and the revenue from licence sales, $681,000. The indirect benefits of sportfishing consist of the net increase in national income generated by the sportfishing related expenditures of non-Canadian anglers. These amount to $8.9 million. Combining direct and indirect benefits, the total value to Canadians of non-resident sportfishing was $17.2 million in 1983.

RÉSUMÉ

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L'enquête menée en 1983 auprès des pêcheurs sportifs non-résidants a fourni des données sur leurs activités en C.-B. Cette année-là, 75 530 pêcheurs à la ligne venant surtout de l'Alberta et de l'État de Washington étaient en possession d'un permis.

Pendant un total estimatif de 497 165 jours de pêche, les visiteurs ont capturé 224 000 saumons et ont effectué des dépenses qui ont beaucoup profité à l'économie canadienne. Au total, les dépenses liées à la pêche sportive s'élevaient à $58 millions en 1983 et elles ont procuré directement ou indirectement en C.-B. 1 857 années-personnes d'emplois et $53 millions de revenus.

La pêche sportive de non-résidants procure des avantages directs et indirects aux Canadiens. Les premiers se situent au niveau du vif plaisir que les visiteurs Canadiens tirent de la pêche sportive, dont la valeur est chiffrée à $7,55 millions auxquels s'ajoutent les $681 000 obtenus de la vente de permis. Les avantages indirects comprennent l'augmentation nette de revenu national engendrée par les dépenses des pêches sportifs étrangers qui s'élèvent à $8,9 millions. Pours les Canadiens, ces avantages directs et indirects ont totalisé $17,2 million en 1983.

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1. INTRODUCTION

The Visitors Sportfishing Survey is part of a database which contains information on sportfishing in tidal waters of British Columbia. It complements the Tidal Sportfishing Diary Program, which provides data on the fishing activities of B.C. resident anglers. The questionnaire was sent out to a random sample of 2,494 licenced tidal anglers who reside in other provinces or territories in Canada or in the United States. Anglers were asked to provide information about trips to British Columbia that included fishing in tidal waters, including catch and effort data and information on trip expenditures (see Appendix A for a copy of the questionnaire). There was a usable response rate of 71% for the 1983/84 questionnaire. The results of the questionnaire and an analysis of the value of visitor sportfishing based on those results are reported here.

2. VISITING ANGLERS

2.1 The Tourist as Angler

Tourism is British Columbia's third largest industry. During 1983, an estimated 6.2 million people visited the province. Almost half (3 million) of these visitors were from other areas of Canada, 2.8 million were from the United States, and 0.4 million were from overseas. Of the 3 million Canadian visitors to the province, 30,275 or 1% purchased a tidal sportfishing licence. About 1.5% (42,575) of U.S. visitors and 0.7% (2,680) of overseas visitors purchased tidal sportfishing licences.

2.2 Visiting Anglers

All anglers aged 16 and over require a licence to fish in B.C. tidal waters for any finfish. This has been a requirement since 1981. In 1983, the licence year was changed from a calendar year (January to December) to a fiscal year

(April to March). In order to facilitate this changeover, the 1983/84 tidal sportfishing licence was valid for 15 months from January 1983 to March 1984. Most of the results presented in this report are thus results relating to that entire 15-month period, with the exception of catch and effort data, which is for the 1983 calendar year only.

Because the tidal water sport fishery is the sole responsibility of the federal government, non-residents are defined as non-Canadians. Non-Canadian anglers are charged higher fees than Canadians. Table 2.1 presents the current schedule of fees and the number of licences sold in 1981, 1982, and 1983/84.

Table 2.1
B.C. TIDAL SPORTFISHING LICENCE SALES

	FEE	NUMBER SOLD IN 1981	NUMBER SOLD IN 1982	NUMBER SOLD IN 1983/84
Resident Annual	$ 5.00	228,127	242,293	245,672
Non-Resident Annual	20.00	19,340	17,779	17,901
Non-Resident 3-Day	10.00	12,832	12,622	12,991
Resident/Non-Resident 1-Day	3.50	21,948	20,967	23,112
TOTAL		282,247	293,661	299,676

Visitors made up 25% of the licenced tidal anglers in B.C., with a total of 75,530 licences. An estimated 10.1% of all resident annual licences are held by visiting Canadians who are not residents of B.C. In addition, 85.7% of one-day licences were sold to anglers who are not residents of B.C.

Information from the licence sample provides some basic data on the origin of anglers. The overwhelming majority of out-of-province Canadian tidal anglers come from Alberta, and about half of American visiting anglers are from Washington state. The origin of visiting fishermen is summarized in Table 2.2. In addition, an estimated 2,680 anglers came from overseas, mostly from Europe.

Table 2.2
ORIGIN OF VISITING ANGLERS

AMERICAN

STATE OF RESIDENCE	% OF ALL AMERICAN VISITING ANGLERS
Washington	50.0
Oregon	7.4
California	19.6
Idaho	3.2
Other	19.8
TOTAL	100.0

CANADIAN

PROVINCE OF RESIDENCE	% OF ALL CANADIAN VISITING ANGLERS
Alberta	68.3
Saskatchewan	6.5
Manitoba	5.5
Ontario	15.0
Quebec	2.7
Yukon and NWT	0.4
Maritimes	1.6
TOTAL	100.0

The licence also provides information on the age and sex of visiting anglers. The age distribution of visiting anglers and B.C. resident anglers is shown in Table 2.3. Visiting anglers are older on average than resident anglers. In addition, 78% of visiting anglers are men. This proportion is fairly typical for sportfishing licences throughout North America (U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census, 1982).

Table 2.3
AGE DISTRIBUTION OF VISITING TIDAL ANGLERS
AND B.C. RESIDENT ANGLERS

AGES	VISITORS %	B.C. RESIDENTS %
16-25	13.5	15.5
26-35	18.4	26.0
36-45	19.7	21.6
46-55	22.1	16.5
56-65	17.9	11.6
65 and over	8.4	8.8
TOTAL	100.0	100.0

Since anglers under 16 do not require a licence, they are not included in the above age distribution table. An estimated 26,000 anglers under 16 years of age visited B.C. in 1983.

2.3 Motivations and Perceptions of Visiting Anglers

Visiting anglers were asked about their reasons for coming to this province. The choices and their responses were as follows:

Fishing	40%
General Vacation	27%
Visiting Friends and Relatives	16%
Other	13%
Business	4%
	100%

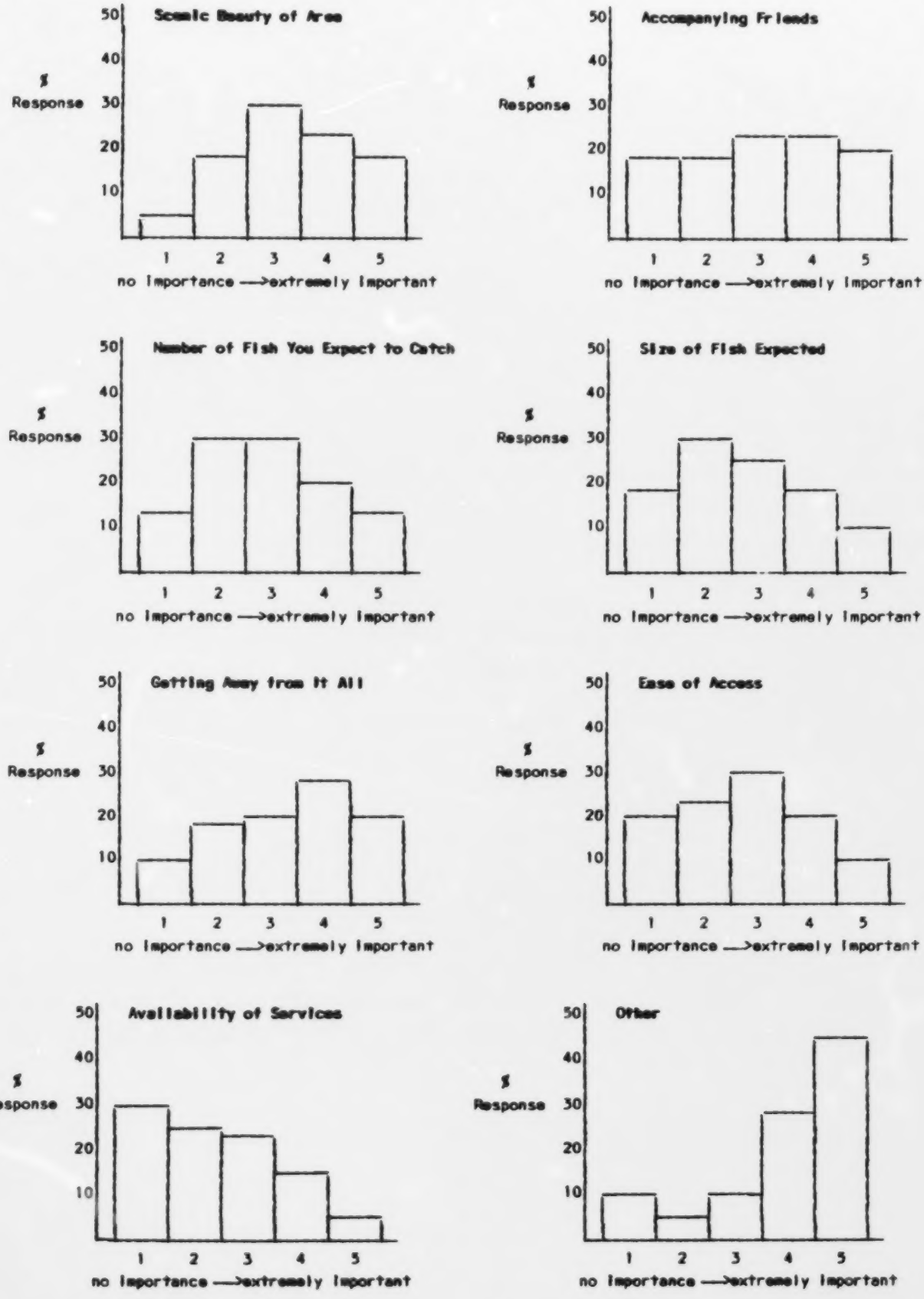
Fishing was cited as the main reason for coming to B.C. for 40% of the respondents. If there were no tidal sportfishing available in B.C., 50% of the respondents indicated that they would still have come to B.C., 14% would still have come but not stayed as long, and 36% would not have come at all.

Respondents were also asked to rate the importance of selected factors in their decisions about where to go fishing. These factors were: the scenic beauty of the area, accompanying friends, number of fish you expect to catch, size of fish you expect to catch, getting away from crowds, ease of access, and availability of services (hotels, restaurants, etc.). An "other" category was also included to account for other reasons respondents might have to select a location to fish. The results of this question are presented graphically in Figure 2.1. If a conclusion can be drawn from this question, it might be that visiting anglers are looking for a scenic wilderness experience with the opportunity to catch a few fish. There were quite a few respondents who had "other" reasons for choosing where to fish. The top five of these reasons, in descending order of frequency are: (1) availability of good campgrounds/trailer parks, (2) attitude of B.C. residents, (3) good fishing, (4) good weather conditions, and (5) cost of food.

Many visiting anglers are repeat visitors to B.C. In response to a question asking how many times visitors had made trips to B.C. in the last five years that included tidal water sportfishing, 5% answered that they had <u>not</u> made any previous trips to fish. Forty-four percent of visiting anglers had visited B.C. to fish three or more times in the past five years.

The majority (71%) of visiting anglers found out about tidal sportfishing in B.C. from friends or relatives. About 2% of respondents found out about sportfishing in B.C. from travel agents; 6% from magazine advertising; 5% from

Figure 2.1
IMPORTANCE OF SELECTED FACTORS IN DETERMINING WHERE TO FISH



local advertising; and 16% from other sources including past visits, having lived in B.C., and sportfishing shows.

A number of visiting tidal anglers also fish in fresh water, as 19% of respondents also purchased freshwater fishing licences.

Anglers were asked to comment on their fishing experiences in B.C. tidal waters. The majority of those respondents who commented on the quality of the fishery stated that fishing was poor compared to previous years. On the other hand, many respondents made favourable comments about their visit in general, the area, and the residents of B.C. A summary of the comments is provided in Appendix B.

3. VISITOR FISHING ACTIVITY AND CATCH

The majority (83%) of anglers surveyed made one trip to B.C. in 1983, during which they fished in tidal waters. An estimated 11% made two trips, and 2% made four trips or more to the province during which they fished. The average length of stay was 11 days. For anglers who made more than one trip, the average length of stay was shorter. The average number of people in visiting parties was 4.2; however, the average number of licence holders in each party was 3.5.

3.1 Distribution of Visitor Fishing Effort

Visiting licenced anglers fished a total of 497,165 angler-days in British Columbia in 1983. Visiting Canadians accounted for 167,791 angler days and non-Canadians 329,374 angler days. This translates to an average 6.6 angler-days per visiting angler.

Certain areas are exceedingly popular with visiting anglers. Table 3.1 shows the percentage of vistors' angler-days reported in each region and

selected statistical areas. Figure 3.1 shows a map of the Department of Fisheries statistical areas.

Table 3.1
DISTRIBUTION OF VISITOR FISHING EFFORT

AREA	ANGLER-DAYS	% OF TOTAL VISITORS' ANGLER DAYS
Total North and Central Coast (Statistical Areas 1-11)	**61,179**	**12.3**
Total West Coast of Vancouver Island (Statistical Areas 21-27)	**53,240**	**10.7**
. Area 23	38,860	7.8
Total South Coast and Fraser (Statistical Areas 12-20, 28, 29)	**382,746**	**77.0**
. Area 12	40,301	8.1
. Area 13	141,976	28.6
. Area 14	41,115	8.3
. Area 15	24,292	4.9
. Area 16	28,655	5.8
. Area 17	31,606	6.4
. Area 18	24,710	5.0

The South Coast and Fraser region accounts for 77% of visitor angler-days and, in particular, the Campbell River area (statistical area 13) is very popular, accounting for 28.6% of visitor fishing effort. Other popular areas include the Nanaimo area (area 17), the Sunshine Coast (areas 15 and 16), and Port Alberni (area 23).

3.2 Visiting Anglers Reporting Catch

Visiting anglers participating in the survey were asked to report on their catch for the year. Table 3.2 shows estimated catch of each species by region.

Visitors caught a total of 224,000 salmon in 1983, compared to 842,000 salmon caught by residents of B.C. (Bijsterveld, James and Moore, 1985), for a total estimated coastwide catch by licenced anglers of 1,066,000 salmon.

The estimated total catch of visiting anglers is lower in 1983 than the catch reported for 1982. This difference, however, appears to be the result of a difference in the wording of the questionnaire, which in 1982 asked for individual catch. In 1983 respondents were asked for party catch, which was then divided by the number of anglers in the party to arrive at individual catch. The change to the questionnaire was made because anglers appear to report boat catch in any case. For a more detailed discussion of the catch and effort estimates, see Bijsterveld, James and Moore, 1985.

3.3 Catch Per Angler Day

Visiting anglers have a lower average catch per day than residents of British Columbia, however, those who use charter services and those whose specific purpose for coming to B.C. was to fish have higher than average catches per angler day. There is also a significant difference between the catch per day of Canadian and non-Canadian visitors who use charters. Comparisons of catch per angler day for chinook, coho, and total salmon are shown in Table 3.3.

Table 3.2
1983 VISITORS SURVEY
CATCH[1] BY REGION
(thousands)

Species	North and Central Coast (1-11)[2]	South Coast and Fraser (12-20,28,29)[2]	W. Coast Vancouver Is. (21-27)[2]	Total (1-29)[2]
Angler Days	61.2	382.8	53.2	497.2
Chinook	9.3	43.1	11.1	63.5
Coho	18.2	91.4	7.1	116.7
Other Salmon	8.9	32.1	2.9	43.9
Total Salmon	36.4	166.6	21.1	224.1
Trout	.3	.6	0	1.0
Lingcod	2.6	18.3	3.7	24.6
Rockfish	3.0	17.8	1.5	22.3
Pacific Cod	1.4	9.8	1.1	12.3
Halibut	.3	0	0	.3
Other Groundfish	2.7	26.6	2.3	31.6
Other Fish	1.3	14.5	2.5	18.3
Crab	3.7	21.2	2.8	27.7
Shrimp/Prawns	0	16.8	0	16.8
Clams	.8	40.9	0	41.7
Mussels	0	.2	0	.2
Abalone	0	.1	0	.1
Oysters	0	25.5	0	25.5
Other Shellfish	24.6	73.2	6.1	104.0

[1] Catch is reported as number of fish kept.
[2] DFO statistical areas.

Table 3.3

COMPARISONS OF CATCH PER ANGLER DAY OF SPECIES

	CHINOOK	COHO	TOTAL SALMON
Residents of B.C.	0.19	0.29	0.55
All Visitors	0.13	0.23	0.45
Visiting Canadians	0.12	0.24	0.48
. Those chartering	0.24	0.39	0.81
. Those not chartering	0.11	0.22	0.43
Visiting Non-Canadians	0.13	0.23	0.44
. Those chartering	0.37	0.39	0.84
. Those not chartering	0.11	0.21	0.38
Visiting Canadians	0.12	0.25	0.48
Main Reason: . Visiting	0.07	0.18	0.35
. Fishing	0.18	0.38	0.71
. Business	0.09	0.15	0.27
. Vacation	0.11	0.16	0.33
. Other	0.06	0.04	0.10
. Visiting and Vacation	0.09	0.17	0.34
Visiting Non-Canadians	0.13	0.24	0.45
Main Reason: . Visiting	0.10	0.18	0.39
. Fishing	0.19	0.32	0.60
. Business	0.10	0.15	0.35
. Vacation	0.07	0.15	0.28
. Other	0.07	0.06	0.22
. Visiting and Vacation	0.07	0.16	0.29

4. ECONOMIC VALUE OF RECREATIONAL FISHING BY VISITORS

In order to manage the fisheries resource in a manner that will yield the greatest benefits to Canadians, the net benefit or economic value derived from competing uses of the resource must be evaluated. Generally, resource use results in a product which is sold and therefore has a market price. With market prices it is possible to calculate the net economic gain from different resource uses and compare them on that basis. However, recreational fishing is not marketed or sold in the manner of other goods and services. Thus there is no market price or value attached to a unit of recreational fishing such as an angler day. This is not to say that recreational fishing has no value. What it does mean is that the value of recreational fishing must be derived from indirect evidence.

Two kinds of values, or benefits, accrue to society from recreational fishing activity; primary or direct benefits and secondary benefits. Primary benefits include the direct benefits (e.g. fun, excitement) that anglers receive from sportfishing. Where there is no charge for sportfishing, this direct benefit is captured by the angler. This unpaid-for benefit is relevant only when the anglers are among the people in whose interests the resource is being managed. In the case of tidal sportfishing, the resource is managed for all Canadians. The economic value of sportfishing must include the benefits derived by residents of Canada from sport fishing but exclude unpaid-for recreation enjoyment of non-residents. Another primary benefit from sportfishing is licence fees. To the extent that sportfishing benefits are paid for, the amount spent must be included as a primary benefit. Thus all licence fees are included as primary benefits.

The other category of benefits of recreational fishing, secondary benefits, refers to the economic gain Canadians derive from anglers' spending on goods and services associated with sportfishing. Secondary benefits are measured by estimating the total amount of spending generated by fishing activity, and subtracting from this the economic cost of providing those goods and services

purchased, to yield a measure of net benefit. Expenditures which would still have been made in Canada in the absence of sportfishing opportunities are not counted as part of the secondary benefits of the sportfishery.

The following two sections give details on how both primary and secondary benefits from visitor sportfishing in B.C. tidal waters are calculated.

4.1 Primary Benefits of Visitor Recreational Fishing

The primary or direct benefit of recreational fishing by visiting Canadian anglers, over and above what they currently pay to go fishing, has been estimated to average $45.00 per angler day. An angler day is defined as any day during which an individual goes fishing regardless of the time spent fishing. This value is based on preliminary analysis of a 1984 survey of tidal waters anglers in four regions, Victoria, Campbell River, the Sunshine Coast and Port Alberni (Cameron and James, 1983). Multiplying the value per angler day times the number of angler days enjoyed by visiting Canadian anglers results in a total annual value of $7.55 million.

The other aspect of primary benefits is licence fees. Table 4.1 details the types of licences sold to visiting anglers, the unit cost and total revenue derived. The total value of visitors licence fees in 1983 was $681,327.

Table 4.1

Licence Type	1983 Sales	Fee	Revenue
Resident Annual	24,813	$ 5.00	$124,065
Non-Resident Annual	17,901	20.00	358,020
Non-Resident 3 day	12,991	10.00	129,910
One day	19,809	3.50	69,332
Total	75,514		$681,327

Combining the two aspects of primary or direct value of visitor recreational fishing results in a total value of 8.23 million dollars.

4.2 Secondary Benefits of Visitor Recreational Fishing

In order to calculate the net secondary benefits from sportfishing activity it is first necessary to determine the total amount of visitor expenditures made in Canada because of the availability of sportfishing. Expenditures by anglers which would still be made in Canada, even in the absence of sportfishing opportunities, must not be included. For this reason the expenditures of visiting Canadians are not included as secondary benefits as it is reasonable to assume that visiting Canadian anglers would have spent their money elsewhere in the economy, thus no change in net benefits to the Canadian economy would occur. In addition, the expenditures of visitors from outside Canada who would still have come even if tidal sportfishing opportunities did not exist can not be included as gross benefits. In the questionnaire respondents were asked if sportfishing opportunities did not exist in B.C. would they 1. still have come, 2. still have come but stayed less (and how many days less) or 3. not have come at all. Thirty-six percent of respondants indicated they would not have come. All of the expenditures of these people are considered part of gross secondary benefits. Fourteen percent indicated that they would still have come but would stay an estimated average of 32 percent less days in B.C. Thus 32 percent of the expenditures of this segment of the population are assumed to be the amount that would not have been spent in B.C. in the absence of tidal sportfishing and therefore included in gross secondary benefits. Table 4.2 shows the total 1983 expenditures by visiting non-Canadian anglers that are attributable to sportfishing. These expenditures are the measure of gross secondary benefits to Canada of visitor sportfishing. The net benefit, or economic value, is the net increase in national income that occurs as a result of angler expenditures directly related to sportfishing. Direct changes to national income are calculated using the Statistics Canada 1979 Inter-Provincial Input/Output model. Wages and salaries are included as net benefits to the economy because

unemployment in hospitality related industries was exceedingly high in 1983 and therefore these wages and salaries would not have been paid (individuals would not have been otherwise employed) if these expenditures had not been made. In a fully employed economy wages and salaries would not be considered a net benefit to the economy.

Table 4.2

TOTAL EXPENDITURES BY NON-CANADIANS
ATTRIBUTABLE TO SPORT FISHING IN 1983

Package Charter		$ 9,122,042
Lodging		1,412,344
Trailer Parks, Campgrounds		403,834
Food	- restaurant	918,023
	- groceries	662,132
	- alcoholic beverages	356,957
B.C. Travel	- car	437,859
	- air	403,088
	- ferry	275,573
	- other	180,519
Boat Rental		263,203
Fishing Supplies		327,206
Bait		179,143
Boat Costs	- gas	815,038
	- repairs	202,249
	- moorage	263,005
	- other	280,605
Guide or Charter Services		309,692
Fish Processing		109,976
Other		646,867
	Total	17,569,355

Table 4.3

SECONDARY BENEFITS OF VISITOR RECREATIONAL FISHING

(thousands of dollars)

	Direct GDP
Wages and Salaries	4,922
Supplementary Labour Income	208
Net Income Unincorp Business	961
Other Operating Surplus	1,965
Commodity Indirect Taxes	657
Other Indirect Taxes	279
Gov't Goods and Services	15
Subsidies	-44
Total	$8,963

The total secondary benefits from visitor sportfishing are $8.9 million. This works out to $27 per angler day for all non-Canadian visiting anglers. The major component of secondary benefits is wages and salaries, at $4.9 million.

The total value of visitor sportfishing in British Columbia is the sum of both primary and secondary benefits or $17.2 million in 1983.

5. ECONOMIC IMPACTS OF VISITOR SPORTFISHING

Expenditures on recreational fishing by visitors to British Columbia have direct and indirect impacts on both the B.C. economy and the Canadian economy as a whole. Direct impacts refer to the employment and income generated in businesses providing goods and services directly to anglers. Indirect impacts

are defined as employment and income generated in other industries by the expenditures of those businesses which provide goods and services to anglers. Indirect impacts also include the induced impacts created by the re-spending of wages and salaries earned as a result of sportfishing expenditures. The closed version of the Statistics Canada 1979 Inter-Provincial Input-Output Model is used here to estimate income and employment impacts.

Total expenditures by visiting tidal anglers in British Columbia are estimated to have been $58 million in 1983. Of these expenditures $25.6 million are attributable to visiting Canadians and $32.7 million to other visitors. Table 5.1 details expenditure estimates by type of spending. These estimates are substantially higher than estimates made as a result of the 1982 survey of visiting anglers. There appear to be two reasons for the difference. First, anglers reacted negatively to a question on the 1982 survey which asked the name of the company providing their package trip as well as the cost of the trip. As a result, many anglers did not fill in this question. Second, respondents were asked about their individual expenditures (the question asked what "you" spent) and these individual expenditures were extrapolated to the population of licenced anglers to arrive at estimates of total expenditures. Anglers seemed to have problems differentiating their individual expenditures from party expenditures. In the 1983 survey respondents were asked about party expenditures on trips that included sportfishing and the number of licenced anglers in the party. Total expenditures on each questionnaire can then be divided by the number of licenced anglers to arrive at expenditures per licenced angler. The expenditure data for 1983 therefore includes expenditures made by, or on behalf of, non-anglers or under 16 unlicenced anglers who are in the sportfishing party. Thus the scope of the data provided in the 1983 survey is much more clearly defined and includes the expenditures of all parties coming to B.C. who went salt water sportfishing either as the main purpose of the trip or as a recreational activity which was simply a part of the visit. As indicated in section 2.3, 40% of respondents indicated that fishing was the main reason for coming to British Columbia.

Table 5.1

ESTIMATED TOTAL EXPENDITURES BY VISITING ANGLERS
IN BRITISH COLUMBIA

	Visiting Canadians	Non-Canadians	Total
Charter Packages	10,009,328	11,952,347	21,961,675
Lodging	2,035,712	3,010,455	5,046,167
Trailer Park	815,426	792,431	1,607,857
Food - restaurant	2,491,263	2,826,789	5,318,052
- groceries	1,626,263	2,052,769	3,679,032
Alcoholic Beverages	765,710	767,823	1,533,533
B.C. Travel - car	2,102,101	1,202,811	3,304,912
- air	826,886	928,360	1,755,246
- ferry	614,886	741,706	1,356,592
- other	247,040	513,240	760,280
Boat Rentals	698,048	667,685	1,365,733
Fishing Supplies	605,585	769,546	1,375,131
Bait	153,383	360,418	513,801
Boat costs - gas	507,065	2,242,605	2,749,670
- repairs	167,510	565,015	732,525
- moorage	240,500	605,588	846,088
- other	98,804	376,191	474,995
Guide or charter service	697,510	707,097	1,404,607
Fish processing	80,740	171,964	252,704
Other	851,394	1,483,878	2,335,272
Total	25,635,154	32,738,718	58,373,872

The income and employment impacts related to expenditures by visiting anglers are presented in Table 5.2. Direct and indirect impacts are shown for British Columbia and the Canadian economy as a whole and are divided into income and employment impacts for Canadian visitors, non-Canadian visitors and all visitors combined.

In British Columbia there are 1,241.7 person years of direct employment as a result of visiting anglers' expenditures and a further 615.4 person years of indirect employment resulting from expenditures by businesses and employees of

Table 5.2

EMPLOYMENT AND INCOME IMPACTS OF EXPENDITURES
BY VISITING TIDAL RECREATIONAL ANGLERS

	Canadian Visitors	Non-Canadian Visitors	Total
Employment[1] in B.C.			
Direct	554.8	686.9	1,241.7
Indirect	273.3	342.1	615.4
Total	828.1	1,029.0	1,857.1
Employment[1] in Canada (total including B.C.)			
Direct	579.8	723.7	1,303.5
Indirect	525.3	663.6	1,188.9
Total	1105.1	1,387.3	2,492.4
Income in B.C. ($'000)			
Direct	11,988	14,955	26,943
Indirect	13,138	15,398	28,536
Total	25,126	31,353	56,479
Income in Canada (total including B.C.)($'000)			
Direct	12,893	16,290	29,183
Indirect	25,775	32,552	58,327
Total	38,668	48,842	87,510

[1] Employment in Person Years

businesses which provide goods and services directly to anglers. The income impacts in British Columbia of visitors' expenditures total $56 million, a direct income impact of $27 million and an indirect income impact of $28.5 million, where income is represented by an overall increase in Gross Domestic Product (wages and salaries + net income of unincorporated business + other operating surpluses + indirect taxes + government goods and services - subsidies). While these figures do not represent the net benefits to society resulting from recreational fishing activities of visiting anglers, they do give some idea of the scope of the industries associated with the recreational pursuits of visiting anglers.

6. SUMMARY

The 1983 Visitors Sportfishing Survey obtained information about the sportfishing activities of visitors to B.C. There were 75,530 licenced visiting anglers in 1983. The majority of visiting anglers come from Alberta and Washington State.

Visiting anglers fished an estimated total of 497,165 angler days and caught 224,000 salmon. At the same time, they made expenditures which had a considerable impact on the Canadian economy. Non-resident total sportfishing expenditures totalled $58 million in 1983, and generated 1,857 direct and indirect person years of employment and $56 million worth of direct and indirect income impacts in British Columbia.

Visitor sportfishing has direct and indirect benefits for Canadians. The direct benefits consist of the fun and excitement that visiting Canadians receive from sportfishing, valued at 7.55 million dollars, and the revenue from licence sales, $681,000. The indirect benefits of sportfishing consist of the net increase in national income generated by the sportfishing related expenditures of non-Canadian anglers. These amount to $8.9 million. Combining direct and indirect benefits, the total value to Canadians of non-resident sportfishing was $17.2 million in 1983.

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APPENDIX A

Government of Canada / Gouvernement du Canada
Fisheries and Oceans / Pêches et Océans

Visitor Sportfishing Survey

Canada

1. How many visits to British Columbia have you made in this licence year (Jan. 1983-Mar. 1984) which included fishing in B.C. Tidal waters?

_____ visit(s)

2. For each visit, please indicate:

- the number of people in your party
- the number of B.C. Tidal waters licence holders in your party
- the number of people fishing in your party aged 15 or under
- the total number of days spent in B.C. for each visit.

	People in party	Tidal waters Licence holders in party	Anglers aged 15 or under in party	Days spent in B.C.
Visit 1				
Visit 2				
Visit 3				
Visit 4				
Visit 5				

3. What was your main reason for coming to British Columbia? (Please check one only)

☐ Visiting friends and relatives ☐ General vacation

☐ Fishing ☐ Other _____

_____

☐ Business

4. Please indicate how your decision to come to B.C. was affected by the availability of Tidal Waters sport fishing (please check one only)

If there were no Tidal sportfishing available in B.C.:

☐ I would still have visited B.C. and substituted other activities.

☐ I would still have visited but would not have stayed as long (I would have stayed _____ days less).

☐ I would not have come at all.

5. Using a scale of 1 to 5, please indicate the importance of each of the following factors in your choice of a place to go fishing by placing the appropriate number in the box.

1 of no importance 4 very important
2 of some importance 5 extremely important
3 important

☐ natural or scenic beauty of the area

☐ accompanying friends

☐ number of fish you expect to catch

☐ size of fish you expect to catch

☐ getting away from crowds

☐ ease of access (marinas, boat-ramps)

☐ availability of services (hotels, restaurants, etc.)

☐ other (specify) _____

6. Please fill in the following table, even if you and your party caught no fish. Instructions for filling out the table are given below.

MONTH	AREA	DAYS	NO. OF PEOPLE	CHINOOK	COHO	OTHER SALMON	OTHER FISH		SHELLFISH	
							number	type	number	type
August	13	4	3	6	3	1	2	lingcod		
August	14	3	3	4	5	2			3	crab

Month: Record the month(s) you personally fished in B.C. Tidal waters in the 1983 licence year (Jan. 1983 through Mar. 1984). Please indicate "84" if the month is in 1984.

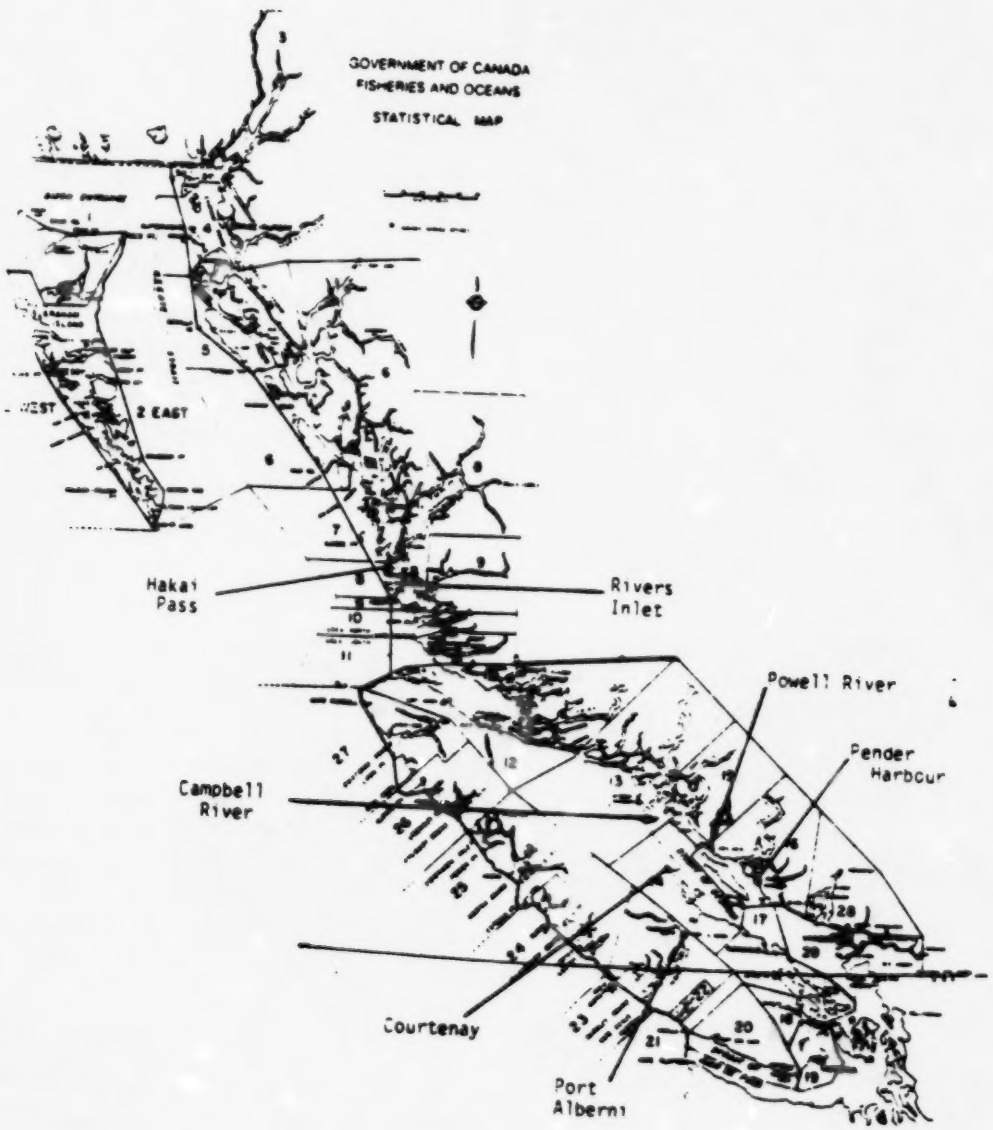
Area: Refer to the enclosed map of Fisheries statistical areas (opposite page), locate the area where you were fishing, and record the corresponding area number. If you fished in more than one area in the month, use a separate line for each area fished, and record the appropriate information for those areas on separate lines.

Days Fished: Record the days you personally fished in each area in each month, **including the days where nothing was caught.**

Number of People Fishing: Record the number of people, including yourself, who actually fished.

Catch: In the appropriate column, record the total number of fish caught by the fishing party (do not include fish that are released).

- 4 -


GOVERNMENT OF CANADA
FISHERIES AND OCEANS
STATISTICAL MAP
2 EAST
Hakai Pass
Rivers Inlet
Powell River
Pender Harbour
Campbell River
Courtenay
Port Alberni

7. Did you purchase any "package" sportfishing trips, tours or outings to fish in B.C. Tidal waters in 1983 (for example, fly-in fishing camps or charter services where the price included transportation, lodging, food, tackle, bait, etc.)?

☐ yes ☐ no

If yes, what was the total price of the package? $_____

8. Excluding package trips, please estimate below the amount of money your party spent <u>in B.C.</u> on trips that included sportfishing in the 1983 licence year (Jan. 1983-Mar. 1984):

1.	Lodging (hotel, motel, cottage rental, etc.)	$_____
2.	Trailer Park (campground fees)	$_____
3.	Food - restaurant meals & snacks	$_____
	- groceries	$_____
	- alcoholic beverages	$_____
4.	Travel Costs <u>within B.C.</u> - car	$_____
	- air	$_____
	- ferry	$_____
	- other	$_____
5.	Boat Rentals	$_____
6.	Fishing Supplies (tackle, clothing, etc.)	$_____
7.	Bait	$_____
8.	Household owned boat cost - gas	$_____
	- repairs	$_____
	- moorage	$_____
	- other	$_____
9.	Guide or Charter services (not included in question 9 on package trips)	$_____
10.	Fish processing (canning, smoking, etc.)	$_____
11.	Other (Specify)	$_____

9. How did you find out about Tidal sportfishing in B.C.

☐ travel agent
☐ friends or relatives
☐ magazine advertising
☐ local advertising while visiting B.C.
☐ other _____

10. How many trips have you made to B.C. in the last five years that included Tidal water sport fishing?

_____ trip(s)

11. Are you intending to fish in British Columbia Tidal waters again before the end of the current licence year (March 31, 1984)?

☐ Yes ☐ No

12. Will you return to fish in British Columbia Tidal waters in future years?

☐ Yes ☐ No ☐ Uncertain

13. Did you also purchase a B.C. provincial freshwater fishing licence during 1983?

☐ Yes ☐ No

14. Please feel free to comment on your fishing experience in B.C. Tidal waters and indicate how it could have been improved.

_____
_____
_____
_____
_____
_____
_____
_____

APPENDIX B

VISITOR SPORTFISHING SURVEY COMMENTS - SUMMARIZED

-	Fishing - positive	76
	- negative	194
-	Guides - positive	35
	- negative	18
-	Residents - positive	90
	- negative	7
-	General - positive	349
	- negative	11
-	Area - positive	120
	- negative	1
-	Accommodations/Campgrounds/Trailer Parks - positive	10
	- negative	2
-	Commercial Fishing Vessels/Fishermen - negative	24
-	Weather - positive	7
	- negative	12
-	Licence Cost - high	14
	- okay	4
	- low	1
-	Licence Availability - poor	1
-	Boat Rental Fees - high	6
-	Lack of Courtesy on Part of Other Boaters	4
-	Cost - General Trip - expensive	17
-	More Launch Ramps Needed	10
-	Red Tide Warnings - positive	1
	- negative	15

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- Price of Fuel - high	3
- Ferry Price - high	3
- Ferry Personnel - discourteous	3
- No Comments	553

SPECIFIC COMMENTS FROM VISITOR SPORTFISHING SURVEYS

Salmon-Fishing Regulations

- Do not change salmon-fishing laws.
- Readily available live bait is good.
- Restrict barbed hooks (3 comments).
- Better understanding of regulations needed.
- Net fishing should not be allowed.
- Limit tackle strength; artificial lures only.
- Regulation requiring release of undersized fish should be changed: fish go into shock.
- Agree with any increased enforcement measures which would lessen and/or prevent possibility of abuse of existing fishing regulations.

Fish Catch Limits

- Should be allowed to catch more fish on good days.
- Raise possession limit for out-of-country fishermen.
- Lower possession limit for non-residents (2 comments).
- More control over fish-catch limits (4 comments).
- Increase possession limits (8 comments).
- Increase annual steelhead limit.
- Curtail herring-fishing (4 comments).
- Catch limits should be lowered or adjusted to reflect fishing pressure.
- Halt fishing immediately until stock increases.
- Disturbed by excessive amount of fish taken by wealthy native commercial fishermen.
- Lower possession limits.
- Lower limits to one salmon (any species) per day per person.
- More liberal allowance for canned and frozen salmon possession limits.
- Reduce coho limit.

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Spawning Grounds/Hatcheries

- Enhance chinook hatchery.
- Restrict fishing for one to two years to help build up fish.
- No fishing in waterways when salmon go up to spawn.
- More hatcheries needed for production of salmon (5 comments).
- Reduce logging near spawning grounds (3 comments).
- More hatchery enhancement.
- Protect spawning streams/grounds (3 comments).
- Should have a salmon protection organization.
- Close fishing areas to allow stock to increase.
- Leave more kelp beds and more herring.
- Restrict commercial fishing and netting from areas close to spawning grounds.
- Protect oyster beds.
- Cut out salmon-fishing for five years to increase stock.
- Eliminate all fishing within three miles of any spawning ground.
- Eliminate logging in spawning grounds.

Commercial Fishing

- Commercial boats get all the fish.
- Control commercial fishing (6 comments).
- Restrict commercial fishing (10 comments).
- Decrease commercial catch limits.
- Longer period of time between commercial fishing times to allow restoration of significant quantity and size of salmon.
- Designate areas for sportfishing and commercial fishing (2 comments).
- Tidal waters overfished by commercial fishermen.
- Commercial boats too close to fine sportfishing grounds.
- Commercial boats should not be allowed in passes.
- Reduce commercial net-fishing in Johnstone Strait.
- Gulf of Georgia should be closed to commercial fishermen.
- Should have controlled hours for commercial fishermen.

Guides

- Guides should not use commercial fishing equipment.
- Should be some inspection of guide equipment: rod, reels, etc., to see that it is in working order.
- More three-day charters around Campbell River.

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Licence

- Licence per boat is better for families.
- Need varying licence length.
- Licence non-residents by the week: $10 per week up to three weeks or $30 annually. Spend proceeds on stream rehabilitation and hatchery production.
- Family licence rate.
- Tidal water licences should be increased to allow more money for fish-rearing and research.
- Non-resident Canadians should be required to pay higher licence fee.
- No charge for any licence other than commercial.
- Fishing should be free like the rest of the world.
- More places to purchase licences.
- Should charge guides licence fee of $300 to $500.

Fishing Information

- More information regarding transportation of canned or frozen fish out of province.
- More information regarding shellfish contamination.
- No available accurate information on red tide.
- Need information brochures on fishing: best hooks, bait, etc.
- Telephone number to call for information (2 comments).
- More information on hook regulations.
- More information on chartered fishing posted: time, cost, hours, etc.
- Could use salmon identification chart.
- Need some sort of news bulletin.
- More general fishing information (6 comments).
- "El Nino" times should be posted, because poor fishing results.

Ferry System

- B.C. Ferry was convenient, enjoyable, and schedules were very good.
- Ferry-loading priority to commercial trucks caused great delay in travel time.
- Ferry wait was terrible because commercial vehicles always got on first - pay the same, should get the same service.
- Threatened ferry strike was unsettling.

Prices

- Gas prices too high (2 comments).
- Food costs were too high.

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Accommodations

- More recreational vehicle parks with hot showers.
- Lack of camping facilities around Ucluelet.
- Trailer parks for motor homes should be updated from 15 amp to 30 amp.
- Better restaurants in Campbell River area.
- More advertising re existing facilities.
- More camping and trailer sites in Campbell River area.
- Need more shower facilities.
- Need more places to deposit garbage (2 comments).
- Accommodations at Painter's Lodge were poor.
- Need more family restaurants and they should stay open longer.
- Silva Bay marina was filthy and restaurant was terrible.

Boat Facilities/Rentals

- Boat ramps for larger trailer boats are important.
- Allow U.S. citizens to moor boat in B.C. and fly to it.
- More moorage needed.
- Boat rentals should have boats where person could bring own motor.
- Need protected boat launches.
- More government docks in Stuart Island area.
- More small craft moorage at Campbell River.
- Improve dock and marina facilities on Mayne Island.
- Need large boats for rent (16' and up).
- Launch ramps and docking facilities at Hornby Island were scarce.
- Boat ramp at Gold River needs fixing up.
- Need more public access to salt water for launching and shore fishing.
- More facilities needed along Alberni canal.
- Improve marinas; get decent-sized boats and fully equipped rental boats; i.e. some boats rented were not equipped with bail cans, etc.
- Better boat launching facilities.
- Improve boat launch, Quadra Island.
- More launching facilities.

Pollution

- Pollution problems in Desolation Sound area (2 comments).
- Disappointed about shellfish affected by pollution.
- Pollution seems uncontrolled.
- Develop improved method of disposing of chemical waste.
- Stricter laws on water pollution.
- Control mill waste being dumped in Campbell River area.
- Too much garbage floating in water.

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General Comments and Suggestions

- Too many small boats in fishing area.
- Larger sportfishing boats like to swamp smaller boats.
- More cooperation between us and Canadian resource management.
- Improve road on island.
- Very poor services from fish processor.
- Should have tourist services available up to October; e.g. boat rental, tourist attractions.
- Killer whales drive away salmon.
- Should inspect fish-smoking companies.
- More docks open for public crabbing.
- Channel should be left open for small craft to get through commercial fleet while their season is open.
- Dry ice is hard to find north of Nanaimo on Vancouver Island.
- Gasoline is hard to come by after dark on Vancouver Island.
- Coast guards are fabulous.
- Some anti-American attitudes.
- More advertising with airlines.
- More fish-smokers available.
- Island highway should be double lanes.
- Four-lane highway to Vancouver.
- Fisheries doing excellent job.
- Penalties for oysters are too severe.
- Derbies should be outlawed.
- Customs officials were unfriendly.